SONY
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NEX-EA50UH

New Style Large Format Sensor NXCAM® Camcorder

Sony Expands the NXCAM Line with a Versatile and Affordable Interchangeable Lens Camcorder

The new NEX-EA50UH camcorder offers creative, high-quality images for a range of applications and features of a large-format sensor, E-mount lens system, and a stylish new design.

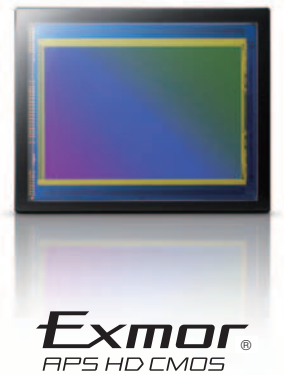
Sony's NEX-EA50UH is the latest addition to the NXCAM line of professional video products. This versatile new camcorder offers the ultimate flexibility in lens selection thanks to its interchangeable E-mount lens system, while the large-format Exmor APS HD CMOS sensor affords creative freedom when shooting Full HD video and high-quality still photos. The stylish new design means that professionals can shoot in a way that suits them best, by allowing quick switches between handheld and shoulder configuration without the need for additional accessories.

nxcam AVCHD Progressive MPEG2 SD Exmor APS HD CMOS Memory Stick SDXC GPS Multi Interface Shoe

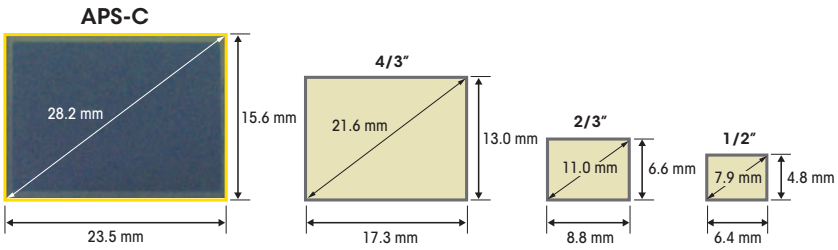
Exmor APS HD CMOS Sensor

The Exmor APS HD CMOS sensor produces high-quality, creative video images with low noise and high sensitivity in low-light conditions, and enables 1080 progressive and interlace recording with 60/50 Hz selection (50p/25p/50i or 60p/30p/24p/60i*).

* 60p/i means 59.94p/i. 30p and 24p mean 29.97p and 23.98p, respectively.



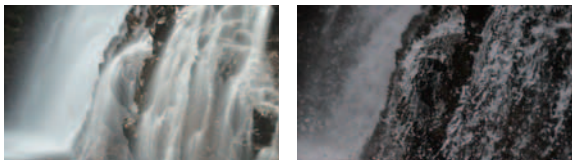
Exmor APS HD CMOS Sensor "APS-C"



Total pixels	Approx. 16.7M
Effective pixels in moving shooting (16:9)	Approx. 13.6M
Effective pixels in still picture shooting (16:9)	Approx. 13.6M
Effective pixels in still picture shooting (3:2)	Approx. 16.1M

Still Picture Shooting

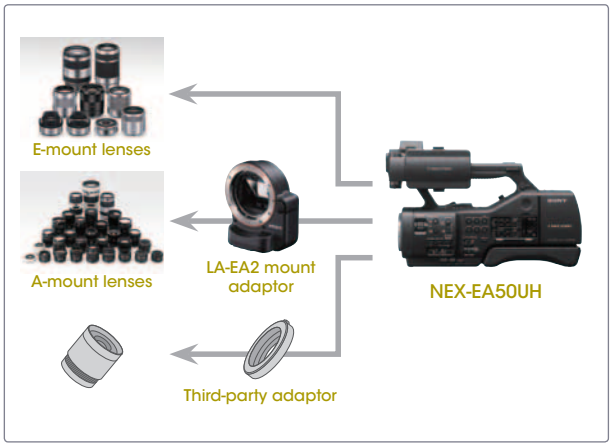
The Exmor APS HD CMOS sensor also captures 16.0 megapixel still pictures with high picture quality. Moreover, the NEX-EA50UH has a built-in mechanical shutter to deliver high-speed shutter while capturing still pictures.



(Simulated images)

E-Mount Interchangeable Lens System

The NEX-EA50UH incorporates the Sony E-mount interchangeable lens system, which enables auto focus, auto exposure, and stabilization during video shooting. With its short flange back distance, it is possible to attach not only established A-mount lenses via the optional LA-EA2 lens mount adapter, but also an unrivalled choice of other-brand lenses using third-party adapters.



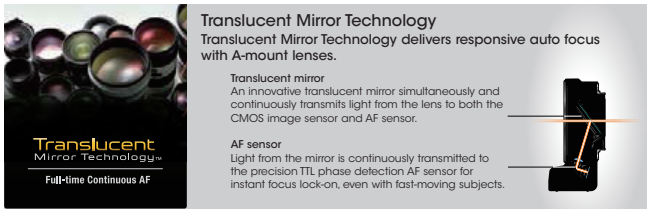
E-Mount Interchangeable Lens System

LA-EA2 Mount Adaptor-compatible

The NEX-EA50UH can attach an A-mount lens via the optional LA-EA2 A-mount-to-E-mount adaptor. Thanks to Translucent Mirror Technology in the LA-EA2, auto focus and one-push auto iris functions are available during motion picture shooting with most A-mount lenses*.

* • The aperture is set to F3.5 when you record movies with auto-focusing. When you are using a lens with an F3.5 or smaller F-stop, the aperture is set to the maximum F-stop of the lens.
• The iris will not adjust automatically in movie mode.

Optional Mount Adaptor LA-EA2 (sold separately)


Translucent
Mirror Technology
Full-time Continuous AF
Translucent Mirror Technology
Translucent Mirror Technology delivers responsive auto focus with A-mount lenses.
Translucent mirror
An innovative translucent mirror simultaneously and continuously transmits light from the lens to both the CMOS image sensor and AF sensor.
AF sensor
Light from the mirror is continuously transmitted to the precision TTL phase detection AF sensor for instant focus lock-on, even with fast-moving subjects.

Variable Shooting Styles

The unique design of the NEX-EA50UH further adds to the camcorder's versatility. When the shoulder pad is extended, it enables the user to balance the camcorder on their shoulder giving added stability for long-duration shooting. Alternatively, when the shoulder pad is returned to the original position, the camcorder becomes compact enough to use in various handheld styles, allowing the user to capture a variety of shots where space is limited.

Power Zoom Lens

The NEX-EA50UH camcorder comes with the newly developed SELP18200 18-200 mm 11X powered-zoom lens (F3.5-6.3). It features auto focus, continuous variable iris, and Optical SteadyShot® image stabilization with Active Mode, making it ideal for shooting moving images. It is electronically controlled by the zoom rocker lever on the camcorder grip and the camera handle, and also controlled by the RM-1BP Remote Commander® (optional accessory). Film-makers can achieve a constant zoom speed and smooth slow zoom, both of which can be difficult to accomplish with manual zoom lenses.

SELP18200

Digital Zoom Function

Thanks to the NEX-EA50UH's 16.0 megapixel sensor it is possible to perform 2x digital zoom without perceivable degradation, using fixed high quality digital zoom function, ensuring you never miss a shot in fast-paced environments. Up to 2X electric zoom with smooth variable speed can be conveniently controlled via a zoom rocker lever located on the camcorder grip and the camera handle, and also controlled by the RM-1BP Remote Commander (optional accessory).

(Simulated images)

Direct Keys and Assignable Control Buttons

Gain, white balance, and shutter speed adjustment can be easily accessed via externally mounted direct buttons.

Control Panel (side)

Control Panel (top)

XLR Audio Inputs with Selectable Phantom Power, Enabling High-quality Linear PCM Recording

Two balanced XLR audio inputs are built in with phantom power and attenuation options that professional users require for clear sound quality. The NEX-EA50UH is also ready to record high-quality 48 KHz/16-bit Linear PCM audio.

Audio Control

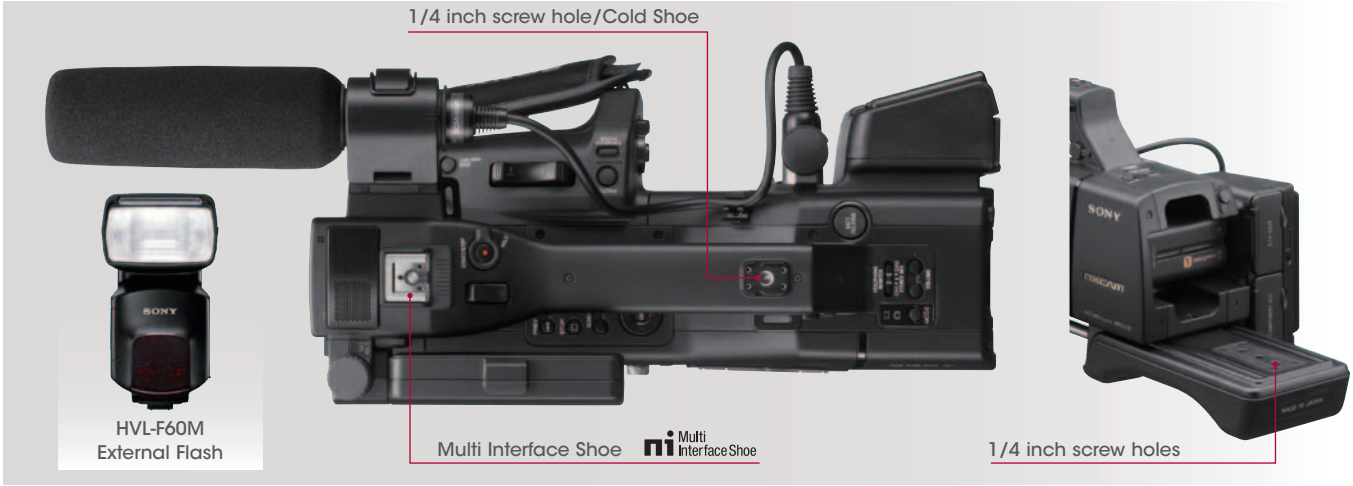
XLR Input

HDMI Output

RCA-pin type video composite and component/audio outputs

Accessory Shoe

The new Multi Interface Shoe is equipped on the camera handle, providing compatibility with an external flash (sold separately) such as the HVL-F60M, while drawing power from the camcorder. It's also compatible with Sony's accessories that use the standard ISO 518 accessory shoe. In addition, there are 1/4 inch screw holes both on the handle and at the bottom of the body for mounting various peripheral devices. Moreover, there are two 1/4 inch screw holes on the shoulder pad for attaching a counter balance and other accessories.

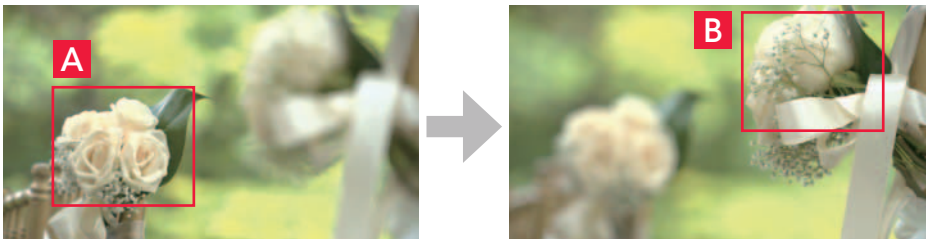


Shooting Support Functions

Convenient Features for Content Creation

Focus Transition

When using an E-mount lens, a focus transition function is available. The camcorder can memorize two focusing positions by assigning setting buttons to each. After the two focusing positions have been set, push the executing button and a smooth focus transition is realized automatically. You can also set the start time and transition duration time.



(Simulated images)

Focus Transition Setting:

1: Set focus point as **A** point to ASSIGN button
2: Set focus point as **B** point to ASSIGN button
3: Once two focus points are set, the focus point moves between the two points when pushing the ASSIGN buttons, according to your preset time duration.

Selectable Magnification and Positioning of Expanded Focus

The camcorder has expanded focus improvement which allows for 4x and 8x magnification and provides a moveable area of expansion for easy focusing with shallow depth of field.

(Simulated image)

Face Detection in Auto Focus

In auto focus mode, the face detection function is useful for getting sharp focus continuously. When there are several faces in the same frame, you can set which face is the priority to keep in sharp focus.

Camera Profile Settings Storage on Memory Card

Up to 99 camera profile settings can be stored, allowing rapid adaptation to multiple shooting environments without time wasted on adjusting parameters. Settings are also easily shared in multi-camera productions.

Marker Indication

Several types of marker help with shooting. Center, aspect ratio, safety zone, guide frame, and other markers can be displayed on the LCD.
For aspect ratio indication, seven types of ratio marker are available. Moreover, you can select the units of measure: feet or meter, dB or ISO, and – for shutter speed – degree or second.

World Cam Switchable 50-Hz and 60-Hz Shooting

The NEX-EA50UH is switchable between 50 Hz and 60 Hz to allow 24p shooting in PAL areas, and to ensure no PAL/NTSC limitations.
The table below shows the available recording frame rates.

Recording Frame rate

HD	PS (28 Mbps) 1920 x 1080/60p, 50p
	FX (24 Mbps) 1920 x 1080/60i, 50i, 30p, 25p, 24p 1280 x 720/60p, 50p
	FH (17 Mbps) 1920 x 1080/60i, 50i, 30p, 25p, 24p 1280 x 720/60p, 50p
	HQ (9 Mbps) 1440 x 1080/60i, 50i
	LP (5 Mbps) 1440 x 1080/60i, 50i
SD	HQ (9 Mbps) 720 x 480/60i, 720 x 576/50i

*Recording media formatted or recorded at 60i (50i) cannot be recorded or played back at 50i (60i), and vice versa.

Geotagging with Built-in GPS Receiver

A built-in GPS receiver makes the NEX-EA50UH an ideal choice for professional videographers. The receiver gives you the ability to "tag" your shooting locations as a future reference. This is useful if you need to return to the same location or to create a log of areas covered when surveying remote locations.
Additionally, the receiver automatically adjusts your camcorder's clock to the proper time zone when international travel is part of your assignment. Your locations can be tracked on Google Maps™* and all GPS data can be extracted with Content Browser, which is supplied PC software.

* Map service requires PC with internet.
Service provided by Google and subject to change without notice.

Safe, Long-duration Recording in a One-piece Body

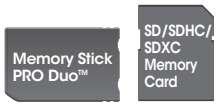
Hybrid Recording

Recording directly to the optional HXR-FMU128 Flash Memory unit allows continuous recording for approximately 10 hours without changing the recording media. Simultaneous recording using a memory card and the HXR-FMU128 is also possible for secure backup when shooting footage that cannot be re-taken.

Note: HD footage and SD footage cannot be recorded separately on different recording media.

Compatible Memory Cards

*For more information, please refer to the specification sheet at the back of this brochure.



HD MOVIE
Linear PCM 2ch (Unit:min)

	HD 28M (PS)	HD 24M (FX)	HD 17M (FH)	HD 9M (HQ)	HD 5M (LP)
1-GB Memory Card	3 (3)	4 (4)	6 (6)	9 (7)	15 (10)
2-GB Memory Card	8 (8)	9 (9)	10 (10)	20 (15)	30 (30)
4-GB Memory Card	15 (15)	20 (20)	25 (25)	45 (35)	70 (60)
8-GB Memory Card	35 (35)	40 (40)	55 (55)	90 (70)	145 (125)
16-GB Memory Card	70 (70)	80 (80)	110 (110)	185 (145)	295 (250)
32-GB Memory Card	145 (145)	170 (170)	225 (225)	375 (290)	590 (510)
64-GB Memory Card	290 (290)	340 (340)	450 (450)	750 (590)	1190 (1025)
Internal Memory (*** GB)	-	-	-	-	-
Flash Memory Unit (128 GB) [Optional]	600 (600)	705 (705)	940 (940)	1560 (1225)	2465 (2125)

HD MOVIE
Dolby® Digital 2ch (Unit:min)

	HD 28M (PS)	HD 24M (FX)	HD 17M (FH)	HD 9M (HQ)	HD 5M (LP)
1-GB Memory Card	4 (4)	4 (4)	6 (6)	10 (8)	20 (15)
2-GB Memory Card	9 (9)	10 (10)	10 (10)	25 (15)	45 (35)
4-GB Memory Card	15 (15)	20 (20)	25 (30)	50 (40)	90 (75)
8-GB Memory Card	35 (35)	40 (40)	60 (60)	105 (80)	185 (155)
16-GB Memory Card	75 (75)	90 (90)	120 (120)	215 (165)	380 (310)
32-GB Memory Card	150 (150)	180 (180)	245 (245)	440 (330)	770 (630)
64-GB Memory Card	305 (305)	360 (360)	495 (495)	880 (665)	1545 (1260)
Internal Memory (*** GB)	-	-	-	-	-
Flash Memory Unit (128 GB)	640 (640)	750 (750)	1030 (1030)	1830 (1385)	3205 (2620)

SD/STD MOVIE
Dolby Digital 2ch (Unit:min)

	SD/STD 9M (HQ)
1-GB Memory Card	10 (10)
2-GB Memory Card	25 (25)
4-GB Memory Card	55 (50)
8-GB Memory Card	110 (100)
16-GB Memory Card	225 (210)
32-GB Memory Card	460 (420)
64-GB Memory Card	920 (845)
Internal Memory (*** GB)	-
Flash Memory Unit (128 GB)	1910 (1755)

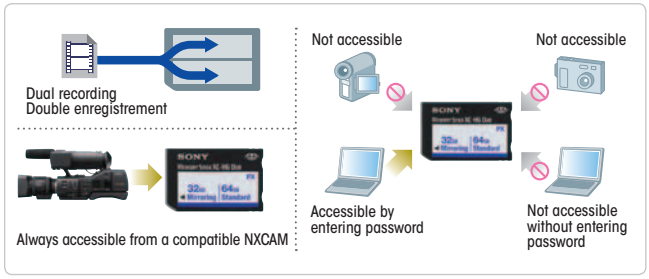
* The maximum continuous recordable time of movies is about 13 hours. The number in ( ) is the minimum recordable time.

SD/DV MOVIE
Linear PCM 2ch (Unit:min)

	SD/DV 25M
1-GB Memory Card	3
2-GB Memory Card	8
4-GB Memory Card	15
8-GB Memory Card	30
16-GB Memory Card	70
32-GB Memory Card	140
64-GB Memory Card	280
Flash Memory Unit (128 GB)	585

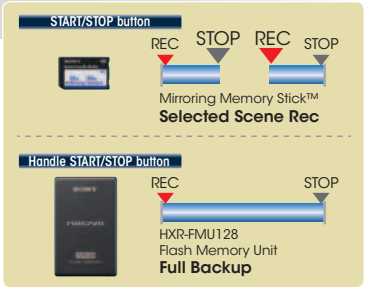
Mirroring Memory Stick® Media (MS-PX64/32/16)* Optional, sold separately

The NEX-EA50UH is compatible with the new memory stick which features a mirroring function. This enables the card to deliver high reliability and data security through a dual-recording (mirroring) function. In addition, there is a secure access feature which reduces the risk of important content being accessed by unauthorized users.



For details, please see
www.sony.net/Products/memorycard

Rec Button Set Function

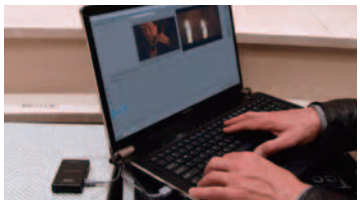


Independent recording control can be set for simultaneous recording on a memory card and the optional HXR-FMU128 Flash Memory Unit by assigning recording media control to two separate START/STOP buttons on the NEX-EA50UH. When simultaneously recording an AVCHD movie on both a memory card and flash memory unit*, the user can start and stop recording on these media at different times, simply by operating the START/STOP buttons on the camcorder or on its handle. This is very useful, for example, when recording selected scenes to a media card while also achieving long-duration backup recording to the flash memory unit.

* HD mode only. Not available in DV mode or SD mode.

Editing Workflow

NXCAM Recording Format



Like other NXCAM Series camcorders, the NEX-EA50UH uses the AVCHD™ format to enable stable operation using the same NXCAM workflow. AVCHD version 2.0 includes shooting footage with a maximum frame rate of 1920 x 1080/60p (28 Mbps) for even higher-quality recording. For more flexibility, the MPEG-2 for SD recording format is also available.
In addition, since timecode is embedded in the HDMI, simultaneous recording is achieved in the AVCHD format using the HDMI Recorder, which enables high bit rate recording.

DV Memory Recording Workflow

Content Browser 2.0.1 or later supports NEX-EA50UH DV recording. It can recognize the camcorder's DV recording folder structure, and can copy clips from memory media to a PC or Mac hard disk drive (HDD). When copying clips to the HDD, Content Browser converts the NEX-EA50UH's DV recording folder into an XDCAM EX DV-AVI folder.

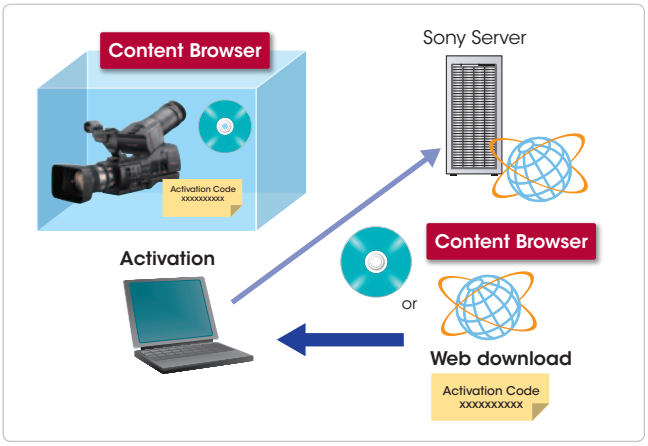
After copying to the HDD, Content Browser can convert DV clips into MXF files or MOV files* (without re-encoding). During the conversion process, divided 2-GB files are combined.

* The MOV conversion function is available with the Content Browser Mac OS edition only.

Content Browser*

Content Browser supports clip management for all kinds of format recorded by the camcorder. In the NEX-EA50UH, one activation serial number is included per camera.

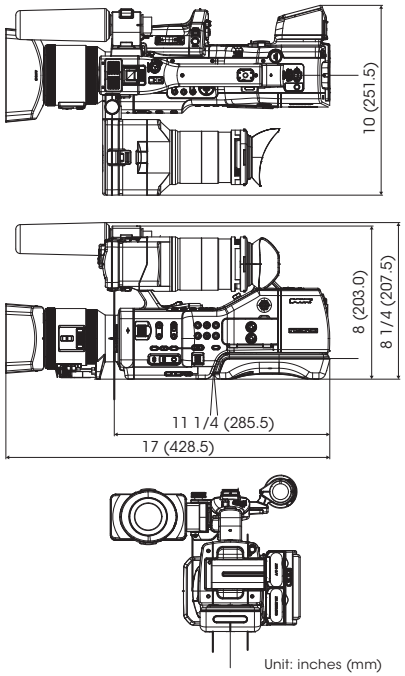
* As NLE software directly recognizes the AVCHD recording folder, copying the entire folder structure is recommended in the AVCHD format instead of using Content Browser.



Specifications

NEX-EA50UH	
Camera	
Imager	Exmor APS HD CMOS Sensor
Number of pixels	Total pixels approx. 16.7M Effective pixels in movie shooting (16:9) approx. 13.6M Effective pixels in still picture shooting (16:9) approx. 13.6M, (3:2) approx. 16.1M
Color temperature	AUTO, ONE PUSH AB, INDOOR (3200K), OUTDOOR (5600K±7 positions) MANU WB TEMP (2300K ~ 15000K, 100K step)
Zoom lens (supplied)	
SELP18200 E-mount Lens	Approx. 11× zoom (Optical) f=18–200 mm, 35 mm equivalent 29 ~ 322 mm (16:9), 27 ~ 300 mm (3:2) F3.5 ~ 6.3 Filter diameter 67 mm Optical Steady Shot installed, Powered zoom
Camera system	
Recording format	
Video recording format	HD MPEG-4 AVC/H.264 AVCHD ver2.0, SD MPEG-2 PS, DV (CBR 25Mbps)
Audio recording format	Linear PCM 2ch (48 kHz 16-bit) (in HD), Dolby Digital 2ch (48 kHz 16-bit)
Recording mode (Recording bit rate is the total of video and audio)	
HD	PS max. 28 Mbps, 1920 × 1080/60p, 50p, 16:9 FX max. 24 Mbps, 1920 × 1080/60i, 50i, 30p, 25p, 24p, 16:9, 1280 × 720/60p, 50p, 16:9 FH approx. 17 Mbps (ave), 1920 × 1080/60i, 50i, 30p, 25p, 24p, 16:9, 1280 × 720/60p, 50p, 16:9 HQ approx. 9 Mbps (ave), 1440 × 1080/60i, 50i, 16:9 LP approx. 5 Mbps (ave), 1440 × 1080/60i, 50i, 16:9
SD	HQ approx. 9 Mbps (ave), 720 × 480/60i, 720 x 576/50i, 16:9, 4:3 DV approx. 25 Mbps, 720 × 480/60i, 720 x 576/50i, 16:9, 4:3
Recording media	Flash Memory Unit (HXR-FMU128), MS PRO Duo (Mark2 only), MS PRO-HG Duo, MS PRO-XC Duo SD/SDHC/SDXC Class 4 and higher
Input/output	
Memory card slot	MS PRO Duo, SD/SDHC/SDXC compatible ×1
HDMI OUT	HDMI connector (type A) ×1
COMPONENTOUT	RCA Pin ×3
VIDEO OUT	RCA Pin ×1
AUDIO OUT	RCA Pin ×2
Headphone jack	Stereo mini jack (ø3.5 mm) ×1
USB jack	Mini-AB ×1
INPUT 1/INPUT 2	XLR 3-pin (Female) ×2
Remote	Stereo mini-mini jack (ø2.5 mm) ×1
External MIC	ECM-XM1 (supplied)
Internal MIC	Built-In Stereo Microphone
Speaker	18ø Dynamic Speaker
LCD screen	
Screen size	8.8 cm (3.5Type) WIDE (16:9)
Total dots (H × W)	Approx.. 921,600 dots (1920 × 480)
General	
Power supply	DC7.2 V (Battery Pack), DC8.4 V (AC-DC Adapter)
Power consumption	5.4 W (w/ SELP18200 Lens)
Operating temperature	32°F ~ 104°F (0°C ~ 40°C)
Storage temperature	–4°F ~ +140°F (–20 ~ +60°C)
Battery operating time (Continuous Recording Time)	360 min (NP-F770), 540min (NP-F970, Optional)
Dimensions (W × H × D) (w/ SELP18200)	5.61 x 8 x 16.9 inches (142.5 mm × 203 mm × 429.5 mm) (including protrusions)
Body weight	3 lb 12.7 oz (1720 g)
Total weight in recording	6 lb 15.5 oz / 3160 g (Weight including SELP18200, Battery [NP-F770], VF w/ large eyecup, ECM-XM1)
Supplied accessories	
AC Adaptor (AC-VL1), Rechargeable Battery (NP-F770), Connecting cord (DK-415), Microphone (EXM-XM1), Remote Commander (RMT-845), Lithium Battery (CR2025), A/V connecting cable, USB cable, USB Adapter Cable (VMC-UAM1), Large LCD View Finder, Large eyecup, Lens (SELP18200), Lens cap & Lens hood, Body cap, Accessory shoe kit, Content Browser (CD-ROM), Manuals (CD-ROM)	

Dimensions



Unit: inches (mm)

Supplied Accessories

Available Accessories

2NP-F970/B
Rechargeable Battery Pack

ACC-L1BP
AC Adaptor/Charger/Battery Kit

VCT-SP2BP
Camcorder Support

HXR-FMU128
Flash Memory Unit

VCT-PG11RMB
Tripod with RM-1BP Remote Controller

HVL-LBPB
Battery Video Light

RM-1BP
Remote Commander Unit

MS-HX32B
(32 GB, 16 GB, 8 GB)
Memory Stick PRO-HG Duo™ Media

SF-32UX
(32 GB, 16 GB, 8 GB)
SD/SDHC Memory Card

MS-PX64
(64 GB, 32 GB, 16 GB)
Memory Stick PRO-HD Duo™ Mirroring Memory Stick media

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V-2566-A (MK11017V1)

Printed in USA (9/13)